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YOUNG & THOMPSON
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EXAMINER

KIMBALL, JEREMIAH T

ART UNIT

PAPER NUMBER

3766

NOTIFICATION DATE

DELIVERY MODE

01/04/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

Office Action Summary

Application No.

10/586,485

Applicant(s)

HERBERT, KEVIN J.

Examiner

Jeremiah T. Kimball

Art Unit

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment after non-final 27 May 2009. Examiner acknowledges Applicant's amendment. **Claims 1 and 3-22 are active.**

Claim Objections

2. Applicant's arguments, see Remarks filed 18 August 2009, with respect to the objections of the claims 3, 4, 5, 6, 19, and 21 have been fully considered and are persuasive. **Therefore, the objections of said claims have been withdrawn.**

Claim Rejections - 35 USC § 102

3. Applicant's arguments, see Remarks filed 18 August 2009, with respect to the rejection of claims 1-6, 8, 11, 14-16, and 19 have been fully considered and are persuasive. **Therefore, the rejections of said claims have been withdrawn.**

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. **Claims 1, 4, 6, 8, 11, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skelton et al. (US 6,292,692), hereinafter Skelton.**
6. In regards to **claim 1**, Skelton discloses a defibrillator device 10 comprising a casing (i.e. housing 60) having a carrying handle 74 and further containing electrical circuitry (i.e. defibrillator module 12, etc.) for generating in use a defibrillation voltage for application to a patient, a control system (i.e. microprocessor 20) for controlling operation of said defibrillator device 10, and a detector means (i.e. on/off switch 76)

which is associated with at least one region of said casing (i.e. incorporated in the handle 74) and which is responsive to at least one of touching by, handling by, or proximity of, an operator, said control system 20 being responsive in use to said detector means 76 to change the operational status of said defibrillator device (i.e. an initial cold boot operation, a warm start, or reboot operation) from a first state to a second state on detection of an operator, wherein said detector means 76 is associated with said carrying handle 74 or an adjacent region on said casing 60, whereby the operational status of the device 10 is capable of being changed in use when the handle is grabbed by the operator (Abstract; Col. 1, Lines 42-56; Col. 3, Lines 34-63; Col. 4, Lines 35-42; Col. 5, Lines 26-55; Col. 9, Lines 31-53; Fig. 3). Skelton describes more of a manual activation of the device 10 by actuating detector means 76 on handle 74, however, automatic activation upon grabbing the device for treatment would have been obvious to one of ordinary skill in the art as it has been held that broadly providing a mechanical or automatic means to replace a manual activity which has accomplished the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 199. In addition, it would have been obvious to make activation automatic upon grabbing the device for treatment as emergency situations regarding external defibrillation must be carried out within a very short amount of time in order to save the patient's life and the AED art is always very concerned about providing treatment in as little time as possible, primarily thru automating various functions of the AED (an additional example being Hansen US 20030120311, disclosed within Applicant's specification on Pg. 3).

7. In regards to **claim 4**, Skelton discloses wherein the detector means defines a sensing region on said casing (i.e. touch/push-activated switch 76), (Fig. 3).
8. In regards to **claim 6**, Skelton discloses wherein said detector means comprises a contact detector 76 (Fig. 3).
9. In regards to **claims 8 and 11**, Skelton discloses wherein said first state is an Off state and said second state is an On state (Col. 5, Lines 26-31; Col. 9, Lines 44-48).
10. In regards to **claims 15 and 16**, Skelton discloses wherein the defibrillator device 10 includes means for issuing instructions to an operator (i.e. display 24) following detection by said detection means 76 and wherein said means for issuing instructions 24 comprises at least one of a loudspeaker or a display 24 on the defibrillator device 10 (Col. 9, Lines 32-44; Fig. 5-11).
11. **Claims 3-6, 8, 11, 14-16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skelton in view of Locke (as previously cited).**
12. In regards to **claim 3**, Skelton discloses switch 76 but fails to explicitly disclose wherein said detection means 76 is one or more selected from the group comprising microswitches, IR detectors, capacitive sensors, and membrane switches. Attention is directed to the secondary reference of Locke, which discloses switch 21 for activating an AED 10 upon detection of the presence of an operator, said switch 21 being an IR sensor or capacitive sensor, among other types of sensors, sensitive to depression, sliding, or touching a button, plate, or membrane, etc. (Par. 33). Skelton and Locke are concerned with the same field of endeavor, namely AEDs. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify

Skelton's switch 76 to be one of a microswitch, IR detector, capacitive sensor, or membrane switch, as taught by Locke, in order to automatically activate an AED by depressing, sliding, or touching a button, plate, or membrane, etc.

13. In regards to **claim 4**, Locke discloses wherein the or each detector means 21 defines a sensing region on said casing 12/14 (Par. 33).

14. In regards to **claims 5 and 6**, Locke discloses wherein the or each detector means 21 comprises a proximity detector or a contact detector (i.e. capacitive sensor), (Par. 33).

15. In regards to **claims 8 and 11**, Locke discloses wherein said first state is an Off state and wherein said second state is an On state (Par. 33-34).

16. In regards to **claim 14**, Locke discloses wherein, following detection of an operator, the control system 22 is operable to change the operational status of the device to a different state if no further detection is detected within a preset period (Par. 34).

17. In regards to **claim 15**, Locke discloses means for issuing instructions (i.e. user interface 29) to an operator following detection by said detector means 21 (Par. 20).

18. In regards to **claim 16**, Locke discloses wherein said means for issuing instructions 29 comprises at least one of a loudspeaker 17 or a display 18 on the defibrillator device (Par. 20).

19. In regards to **claim 18**, Locke discloses wherein the control system 22 is operable to issue an instruction for the operator to touch or trip a further sensor (i.e. shock key 19) on detecting absence of the operator (e.g. lack of a keypress) following

said change from said first operational state to said second operational state (Par. 24; Fig. 2).

20. Claims 7, 13, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skelton in view of Nova (as previously cited).

21. In regards to **claim 7**, Skelton fails to explicitly disclose wherein said control system 20 is operable on sustained detectors of an operator to change the operational states of said defibrillator device from said second state to a different state. Attention is directed towards the secondary reference of Nova, which discloses an automated external defibrillator (AED 10) wherein the rescuer merely presses the start button 12 and holds it for a predetermined time to power off the AED 10 (Col. 8, Lines 42-46; Fig. 1A). Skelton and Nova are concerned with the same field of endeavor, namely the design of systems and methods for AEDs. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Skelton's switch 76 to be operable to change the operational state of an AED from one state to another (i.e. On to Off) by utilizing sustained interaction with a sensor detecting the presence of an operator, as taught by Nova, in order to provide a means for utilizing the same detector for changing between various AED operational states.

22. In regards to **claim 13**, claimed subject matter is substantially similar in scope to matter rejected earlier in claim 7 above; therefore claim 7 is rejected for at least the same reasons by Skelton and Nova.

23. In regards to **claim 17**, Nova discloses wherein the control system 22 (and Nova's microprocessor 24) is operable to issue an instruction to the operator (i.e. Fig.

10H) to connect a further item of equipment (i.e. electrodes), on detecting absence of an operator (i.e. lack of placement or connection of electrodes on patient) following the change from said first operational state to a second operational state (Col. 11, Lines 5-26; Fig. 7 and 10H).

24. Claims 9, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skelton in view of Olsen (as previously cited).

25. In regards to **claim 9**, Skelton fails to explicitly disclose wherein said first state is a quiescent or sleep state, although describing cold boot, warm boot, and reboot options (Col. 5, Lines 26-31). Attention is directed towards the secondary reference of Olsen, which discloses an AED 10 wherein when the AED 10 is not in use, the AED 10 is in a first state of stand-by mode (i.e. sleep state). Olsen also discloses a second AED state, rescue mode (i.e. On-state), is initiated when an operator activates AED 10 (Col. 3, Lines 14-17; Col. 4, Lines 32-33). Skelton and Olsen are concerned with the same field of endeavor, namely the design of systems and methods for AEDs. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Skelton wherein an AED's first state is a sleep state, as taught by Olsen, in order for the AED to be ready at a moment's notice in an emergency and perform self-tests while not in use.

26. In regards to **claim 10**, Olsen discloses wherein said control system is operational periodically to initiate a self-check routine during said sleep state (Col. 6, Lines 17-63).

27. In regards to **claim 12**, Olsen discloses wherein said second state (i.e. rescue mode) is a self-test state in which said control system initiates a self-test routine (Col. 4, Lines 32-50).

28. **Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skelton in view of Medema et al. (US 2004/0124979), hereinafter Medema.**

29. In regards to **claim 19**, Skelton fails to disclose one or more attitude sensors for detecting the attitude of the casing 60 and for supplying the corresponding attitude signals to said control system 20. Attention is directed towards the secondary reference of Medema, which discloses an AED 12 with activation detector 76 as an accelerometer that detects movement of AED 12 (i.e. when it is removed from a mount) and wherein attitude signals from the accelerometer 76 are supplied to a control system 64 (Par. 48; Fig. 6). Skelton and Medema are concerned with the same field of endeavor, namely systems and methods for AEDs. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Skelton to include one or more attitude sensors, as taught by Medema, to detect the spatial orientation of an AED for the purposes of activation and processor decisions related to time of treatment delivery.

30. **Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skelton in view of Miller (as previously cited).**

31. In regards to **claim 20**, Skelton fails to disclose wherein after application of a defibrillation voltage in use to a patient, detection by said detector means 76 of the presence or absence of operator causes the device to provide and/or store post-rescue

data. Attention is directed towards the secondary reference of Miller, which discloses an AED system 8 comprising a defibrillator 10 and a supply module 14, wherein the defibrillator contains memory 56 and supply module contains local data storage memory 38. Miller also discloses after delivery of treatment shocks, the system 8 detects user presence by "mark" button 52/54, which causes the device to store post-rescue data (i.e. ECG data sensed during and after treatment with delivery shocks, audio input from a microphone 62, etc.), (Col. 3, Lines 44-58; Col. 4, Lines 25-40; Col. 6, Line 4 – Col. 7, Line 37; Fig. 1-4). Skelton and Miller are concerned with the same field of endeavor, namely the design of systems and methods for AEDs. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Skelton's switch 76 to be operable to store post-rescue data after application of a defibrillation voltage to a patient and as a result of the detection of the presence of an operator, as taught by Miller, in order to enable the AED operator to control and store rescue data within the system for later analysis and evaluation.

32. In regards to **claim 21**, Miller disclose wherein the defibrillator device includes means for storing data (i.e. memory 56 and 38 for storing an audio recording of the rescue) relating to the operation of the device, wherein detection by detector means of the presence or absence of operator causes the device to provide and/or store post-rescue data (Col. 6, Lines 25-41).

33. In regards to **claim 22**, Miller discloses wherein the defibrillator device includes means for storing data relating to the operation of the device (i.e. memory 56 and 38 for storing an audio recording of the rescue) following the application of a defibrillation

voltage to a patient, and said control system is responsive to a signal from said detector means to apply a compression algorithm to said stored data (Col. 6, Lines 25-41).

Response to Arguments

34. Applicant's arguments with respect to said claims above have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremiah T. Kimball whose telephone number is (571)270-7029. The examiner can normally be reached on 10am-6:30pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl H. Layno can be reached on 571-272-4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carl H. Layno/
Supervisory Patent Examiner, Art Unit 3766

/J. T. K./
Examiner, Art Unit 3766
December 22, 2009